Title (en)
METHODS AND SYSTEMS UTILIZING RECIRCULATING FLUID FLOWS

Title (de)
VERFAHREN UND SYSTEME MIT VERWENDUNG VON RÜCKFÜHRENDEN FLUIDUMSTRÖMEN

Title (fr)
PROCÉDÉS ET SYSTÈMES UTILISANT DES ÉCOULEMENTS DE FLUIDE DE RECIRCULATION

Publication
EP 3658199 A1 20200603 (EN)

Application
EP 18779748 A 20180727

Priority
- US 201762538272 P 20170728
- IB 2018000961 W 20180727

Abstract (en)
[origin: WO2019021061A1] One aspect of the invention provides a system for dispensing and printing cells and particles. The system includes: (a) a flow confinement device; (b) a controller configured to generate a confined liquid volume outside the flow confinement device, wherein the confined liquid volume or materials contained in the confined liquid volume can be released to the environment by confined, modulated, and non-confined flow modes in arbitrary sequence and for arbitrary periods of time by said controller; (c) one or more liquids containing cells or cell constituents supplied into the confined liquid volume through the flow confinement device; (d) a substrate; and (e) a system configured to position the flow confinement device in 3D space and, therefore, the confined liquid volume to be positioned relative to the substrate, such that the confined liquid volume and contents, can interact with the substrate.

IPC 8 full level
A61L 27/38 (2006.01); **A61M 35/00** (2006.01); **B33Y 10/00** (2015.01)

CPC (source: EP US)
A61L 27/38 (2013.01 - EP US); **B29C 64/106** (2017.08 - US); **B29C 64/321** (2017.08 - US); **B29C 64/386** (2017.08 - US); **B33Y 10/00** (2014.12 - EP US); **B33Y 50/00** (2014.12 - US); **B33Y 70/00** (2014.12 - US); **C12M 21/08** (2013.01 - US)

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
WO 2019021061 A1 20190131; EP 3658199 A1 20200603; US 12012578 B2 20240618; US 2020165554 A1 20200528

DOCDB simple family (application)
IB 2018000961 W 20180727; EP 18779748 A 20180727; US 202016774453 A 20200128